

Graphing Practice

- 1) A student conducted an experiment to find out if air temperature affected the total number of seeds that germinate. Two groups of 100 identical seeds were used. One group was kept at an air temperature of 10°C and the other at an air temperature of 20°C. All other conditions were held constant. Observations made during the experiment are shown in the data table below. Plot a graph to show the relationship between these two variables. Be sure to include all required components for the graph. Write a brief summary of results from the experiment.

Data Table

Day of Observation	Total Number of Seeds that Germinated at 10°C	Total Number of Seeds that Germinated at 20°C
5	0	5
10	20	35
15	40	70
20	45	80
25	45	80

- 2) A local conservation group is studying how human housing affects rabbit populations. Plot a graph to show the relationship between these two variables. Be sure to include all required components for the graph. Write a brief summary summing up the data.

Year	Number of Rabbits per km ²	Number of Houses per km ²
1990	75	1
1991	72	2
1992	64	3
1993	60	5
1994	56	8
1995	51	10
1996	46	13
1997	35	14
1998	29	16
1999	21	16

- 3) Plot the following information regarding the heights and masses of male and female students in the United States in 1994. Be sure to include all required components for the graph. Show table data on two graphs; one for height, one for mass. OR accept this challenge: Put all information on ONE graph. Be neat. Write a brief summary describing the findings of this study.

Average Height and Average Mass
of Students Age 8 to 16 in the United States in 1994

Age (years)	Average Height (cm)		Average Mass (kg)	
	Female	Male	Female	Male
8	127	128	28	27
10	140	140	34	35
12	152	154	46	45
14	161	165	55	56
16	163	175	57	66